

Roadway ADA Design Features

General Notes:

Slopes - 8.33% = 1V:12H; 2% = 1V:48H;

PAR - Pedestrian Access Route

Maximum (Max) - Cannot exceed the value shown after constructed and must account for construction tolerances;

Minimum (Min) - Cannot be less than the value shown after constructed and must account for construction tolerances;

****NOTE BR1:** Applies to pedestrian ramps for bridges, pedestrian bridges and undercrossings, sites such as rest areas, park & ride lots, transit facilities, shared-use paths and "meandering" pedestrian access routes (independent horizontal and vertical alignment from the roadway)

Design Features → ↓ Element	Curb Ramp	Sidewalk	Driveway Crossing	Crosswalk	Landing	Crossing Through Island/ Median	Pedestrian Access Route	Building & Facilities Ramp ** See Note BR1	Footnotes
Width	Minimum: 4 feet	Desirable: 5 feet Minimum: 4 feet W4	Desirable: Same as sidewalk width Minimum: 3 feet W2	Desirable: 10 feet Minimum: 4 feet W3	See Other References Below	Minimum width: 5 feet Minimum length: 6 feet	Desirable: 5 feet W4 Minimum: 4 feet	Desirable: 4 feet Minimum: 3 feet W1	W1 - Provide a 3 feet min clear width between handrails; W2 - At the top of driveway apron provide a min 3 feet wide PAR with a 2% max cross slope; W3 - Provide a min 4 feet wide PAR with a 2% max cross slope; W4 - If width is less than 5 ft. provide passing areas 5 ft. wide by 5 ft long, at 200 ft. max intervals
Cross Slope	Maximum: 2%	Maximum: 2%	Maximum: 2% C1	Maximum: 2% C2, C3	Maximum: 2%	Maximum: 2%	Maximum: 2%	Desirable: 1.5% Maximum: 2%	C1 - Provide a 2% max cross slope at the top of driveway apron for a min 3 feet wide PAR; C2 - Provide a min 4 feet wide PAR with a 2% max cross slope; C3 - Max 5% at crossing locations without stop control (mid-block)
Running Slope	Minimum: 5% Maximum: 8.3% R1	Maximum: 5% R2	R2	Maximum: 5%	Maximum: 2%	Maximum: 5%	Maximum: 5% R1	Desirable: 5% Maximum: 8.3% R1	R1 - May be used for Preservation type projects where space is limited: 1) If vertical rise less than 3 inches, Slope can be between 10% and 12.5%; 2) If vertical rise less than 6 inches, Slope can be between 8.3% and 10% ; R2 - Allowed to match the grade of the roadway grade when located parallel and adjacent to the road
Max Vertical Rise	N/A	V2	N/A	N/A	N/A	N/A V3	V2	Maximum: 30 inches V1, V4	V1 - Between landings; V2 - Allowed to match the grade of the roadway grade when located parallel and adjacent to the road; V3 - Desirable 3 inch vertical rise for a curb ramp located in an island; V4 - Ramp runs greater than 6 inches in height or vertical rise shall have handrails
Allowable Vertical Lip	Be at same Level as adjacent surfaces	1/4 inch D1	1/4 inch D1	1/4 inch D1	1/4 inch D1	1/4 inch D1	1/4 inch D1	1/4 inch D1	D1 - Vertical edge less than or equal to ½ inch shall be beveled at 1V:2H min;
Curb Flare Slope	Maximum: 10% CF1	N/A	Maximum: 10% CF1	N/A	N/A	N/A	N/A	N/A	CF1 - Measured parallel to the curb
Horizontal Encroachment of Obstruction	Maximum: 4 inch H1	Maximum: 4 inch H1	Maximum: 4 inch H1	Maximum: 4 inch H1	Maximum: 4 inch H1	Maximum: 4 inch H1	Maximum: 4 inch H1	Maximum: 4 inch H1	H1 - Projection from edge of wall or post, measured 0.5 feet above finished surface
Vertical Clear Area	80 inches VC1	80 inches VC1	80 inches VC1	80 inches VC1	80 inches VC1	80 inches VC1	80 inches VC1	80 inches VC1	VC1 - No features to be located within the clear area, measured from the finished surface; VC2 - Objects that don't extend to ground shall protrude no more than 12" as approached from front and 4" from side.
Counter Slope	Maximum 5%	N/A	N/A	Maximum 5%	N/A	Maximum 5%	N/A	N/A	
Landing	Width - Min. Match Curb Ramp Width Length - Desirable: 4 feet L1	N/A	N/A	N/A	N/A	See Curb Ramp if raised	N/A	Width - Min. Match Ramp Width L2, L3, L4	L1 - Min length is 3 ft.; L2 - Provide a 3 feet min clear width between handrails; L3 - Min 5 feet by 5 feet level landing where a change in direction between runs occurs; L4 - Landings are required at the top and bottom of each ramp run and every 30 inch vertical rise;
Detectable Warning Surface	DW1	N/A	N/A	DW2, DW3	N/A	DW1, DW3	DW2, DW3	N/A	DW1 - Install detectable warning surface 6 inch behind face of curb, minimum 2 ft. wide, and full width of the curb ramp; DW2 - Install detectable warning surface on paved shoulders at the following locations: 1) If a pedestrian signal (ped heads) with a marked crosswalk is at the intersection; 2) When a separated pedestrian path intersects a paved shoulder; DW3 - End warning surface prior to entering a traveled lane;

NOTE - The criteria in this table reflects national ADA requirements. The criteria in the Design Manual may exceed this criteria for other reasons.